

This slide deck is intended to serve as the kick-off/introduction for the Mission Assistance Effort entitled: "Achieve Stable and Economical Production Rates.

Background: A "Rapid Deployment Training (RDT)" effort was initiated to provide a general overview of the five overarching "Thrust Areas" which in-turn encompass 22 specific Better Buying Power Initiatives (BBPi), included on the "Guidance Roadmap (next slide). Of the 22 specific initiatives, 14 have been broken out to comprise an initial set of Mission Assistance Modules that may be presented to Program Management Offices, or other organizations, on an ad-hoc basis.

Many of the initiatives are inherently complementary. In particular, this one, entitled: "Contributing Factors to Achieving Stable and Economical Production Rates" is no exception. More specifically, it focuses on production planning with an emphasis on Joint Supply Chain Architecture, Funding stability, Contracting approach (e.g. Multi-year, advance procurement, options, dual sourcing), Operational Requirements, Contractor capacity (e.g. Personnel, tooling, shifts...), Accurate estimating, Requirements stability, Use of process improvement methodologies, such as Continuous Process Improvement, Lean/Six Sigma, and Total Ownership Cost, and Support and sustainment requirements... To name a few!

Recommended Approach: It is anticipated that this module, including these introductory charts, will be used to facilitate and instill critical thinking that will result in the establishment of processes that effectively and efficiently address the various facets of achieving Stable and Economical Production Rates.

	*\U	Notion	al Agenda		
	"Ac	Mission Ass	ower Initiatives (BBPi) sistance Module: conomical Production Rates"		
	Minutes	Block Title	Block Description		
	0-50	"Training Camp"	Introductions and why we're here		
	50-60	-Break-			
	60-110	"Game Plan"	Identify factors for consideration		
	110-120	Break-			
	120-210	"OTA" (Organized Team Activity)	Application of tools & Critical Thinking		
	210-220				
	220-240	"Chalk-Talk"	Recap and plan forward		
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Most likely the sponsor will want some time upfront to identify some specific goal and sell the basic approach.

Make adjustments as necessary.

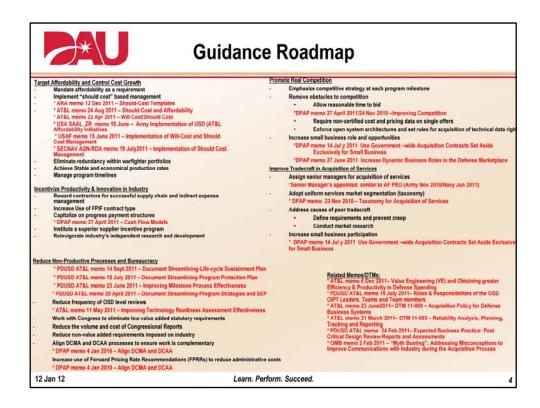
Around the room introductions may also be appropriate.

Better Buying Power Initiatives (BBPi) Mission Assistance Module: "Achieving Stable & Economical Production Rates"				
Minutes	Block Title	Block Description		
0-50	"Training Camp"	Introductions and why we're here		
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60-110	"Game Plan"	Identify factors for consideration		
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This slide shows the 5 thrust areas along with the 23 initiatives at the first indenture level; note that the red sub bullets indicate associated implementing policy memos.

This module: "Achieve Stable and Economical Production Rates" is highlighted.

NOTE: The asterisks to the right of the specific bulletized initiatives and subinitiatives indicate indicates a Mission Assistance Area (to include some that combines), as note below:

#### **Initiative Title**

- 1. Mandate Affordability (1.1)
- 2. Will Cost/Should Cost (1.2)
- 3. Elim. Portfolio Redundancy (1.3)
- 4. Stable/Econ Prod Rates (1.4)
- 5. Shorter Program Timelines (1.5)
- 6. Reward Supp. Chain/Ind. Cst Mgmt (2.1)
- 7. Where Approp, Incr FPIF Contract Use (2.2)
- 8. Capitalize on Progress Paymts (2.3)
- 9. Emphasize Comptve Strat (M/S) (3.1)
- 10. Remove Competition Obstacles (3.2)
- 11. Open Sys Arch/ Tech Data Rights (3.2)
- 12. Address Causes of Poor Tradecraft (4.3)
- 13. Increase Small Business (3.4/4.4)
- 14. Reduce Low Value Industry Reqm'ts (5.3)



Why we are here...

#### Schedule Delays \* Economic Decline \* Budget Overruns

- GAO: "Production Issues" cited as a causal factor in 22% of Nunn-McCurdy Breaches (1997-2009) [GAO Report GAO-11-499T)].
- 296 Billion Dollars in DOD Cost Overruns: 2009 GAO Weapons Systems Assessments
  - Cumulative cost overruns are almost \$296 billion in 2009 dollars
  - 64 of 96 active defense programs reported increases in their projected cost since their initial cost estimate.

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This chart reflects GAO supporting data for what OSD/AT&L found, and is in part the basis for their subsequent response to via the initiatives:

- -Funding instability due to changes in quantities being acquired
- -Lack of application of improvement methodologies such as Continuous Process Improvement, Lean/Six Sigma, Reduction of Total Ownership Cost, etc.
- -Lack of planning for Diminishing Manufacturing Sources and Material Shortages (DMSMS) and long lead items
- -Lack of focus on production planning and Joint Supply Chain Architecture -The nature of the "Production Issues" were not specified within the GAO Report (GAO-11-499T)



Again, this is just another representative sample of what we are facing: Production quantities are in constant flux.

As an aside, although higher production numbers are generally thought to offer a lower price, this presentation show or remind participants that consideration of Economic Production Quantities (EPQs) requires consideration of more than just quantity.



## Achieve Stable and Economical Production Rates

Background: In his first year as the Under Secretary of Defense for Acquisition Technology and Logistics (Dr. Ashton Carter) noticed limited productivity across DoD, to include:

- Production Cost continued to increase for the same item over time
- Noted that Small Business was not constructively engaged
- Requirements were generated without consideration of cost or affordability

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This is the heart of what we are looking to address.

Note that it is consistent with the GAO Report cited earlier.

It is also clear that working this Mission Assistance Module in conjunction with others may be a prudent approach. In particular, it appears that the use of a Fixed Price Incentive type contract may help to bridge the gap from the uncertain costs accumulated in the developmental efforts, while at the same time incentivizing efficiencies that will ultimately result the opportunity to lock in at the lowest possible Fixed Price arrangement. Likewise, inclusion of Small Business will aid in maintaining an eye toward inovation and competition.



# Actions ongoing or planned by OSD/AT&L and CAEs

- Introducing affordability requirements into programs further into development or production selectively
  - Establishing economic order quantities and economical production rates
  - Defining production rate change limits based on affordability assessments and production capabilities
- Present Affordability Analysis at Milestones A and B
- Production Rate Range approved at Milestone C
- Deviations from limits require USD(AT&L) approval prior to implementation or submission with component POM
- Expanded Requirements Management training
  - Requirements "creep" in capabilities or quantities can disrupt production rates

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## **USD AT&L Expectations**

- "Government and industry both benefit from economic order quantity (EOQ) rates of production, and from stability in production year after year. Unfortunately, quantity cutting and turbulence to meet budget targets is widespread. Production rates are a critical part of any acquisition strategy approved by me. Therefore, beginning immediately, I will expect production rate to be part of the affordability analysis presented at Milestones A and B. Furthermore, at Milestone C, I will set a range of approved production rates. Deviation from that range without my prior approval will lead to revocation of the Milestone."
- "I expect to see a 5 percent annual increase in the number of ACAT ID and IC programs executing at their EOQ level."

Excerpts from USD AT&L Better Buying Power Initiatives

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USD AT&L expectations are clear:

Production rates are an inherent part of any Program affordability analysis.

Programs should execute at their EOQ level.